



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/803,161	03/17/2004	Hans Groeblacher	2309.2007-000	4140

21005 7590 10/16/2006

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.  
530 VIRGINIA ROAD  
P.O. BOX 9133  
CONCORD, MA 01742-9133

EXAMINER
----------

DEL SOLE, JOSEPH S

ART UNIT	PAPER NUMBER
----------	--------------

1722

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/803,161	<b>Applicant(s)</b> GROEBLACHER ET AL.	
	<b>Examiner</b> Joseph S. Del Sole	<b>Art Unit</b> 1722	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) 13 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☒ Claim(s) 4 and 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                           | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## **DETAILED ACTION**

### ***Election/Restrictions***

1. Claim 13 is withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the replies filed on 5/19/06 and 9/29/06.

### ***Double Patenting***

2. Applicant is advised that should claim 4 be found allowable, claim 9 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k). The examiner notes that “outer member” and “retaining ring” in this instance amount to differences in wording. All accompanying limitations of the outer member are drawn to it being a ring (it surrounds) that retains (screws there through for components retention). There is total overlap of the scopes of claims 4 and 9.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens (3,221,371).

Stevens teach an extrusion die having an inner die portion having a male form, the male form having a male complex shape with peaks; an outer die portion having a female form, the female form having a female complex shape with peaks which corresponds to the male complex shape of the male (Figs 2 and 7) form, the female complex shape surrounding and being separated from the male complex shape by a gap, flowable material capable of being extruded through the gap between the male and

female complex shapes to form a hollow profile (Figs 2 and 7); and an adjustment mechanism comprising an outer member surrounding the outer die portion (Fig 2, #19), and adjustment screws (Fig 2, #s 20 and 55) threaded through the outer member and engaging the outer die portion at equidistant angular locations and configured to provided controlled incremental linear and rotational adjustment of the female complex shape relative to the male complex shape for adjusting the gap and for adjusting the position and orientation of the corresponding peaks of the male and female complex shapes relative to each other; the male complex shape of the inner die portion is surrounded by the female complex shape of the outer die portion on all sides (Fig 7); the peaks are symmetrically divided on opposite sides of a central axis and number four (Fig 6); in which the inner die portion is fixed within a spider pipe (Fig 2); and in which the outer member of the adjustment mechanism is a retaining ring which secures the outer die portion to the spider pipe, the adjustment screws being threaded radially inwardly through the retaining ring to engage the outer die portion (Fig 2, through #21).

Stevens fails to teach the complex shape made by multiple valleys of both the inner and outer members; and there being at least 8 adjustment screws.

Stevens teaches complex shapes and “[T]here is no invention in merely changing the shape or form of an article without changing its function except in a design patent.” (See *Eskimo Pie Corp. v. Levous et al.*, 3 USPQ 23) thus Stevens can be modified for the purpose of forming a shape having valleys. Stevens teaches that four adjustment screws are sufficient for adjustment, however, regarding the claims, the mere duplication of parts, in this using case using eight adjustment screws has no patentable

Art Unit: 1722

significance unless new and unexpected results are produced. In re Harza, 124 USPQ 378 (CCPA 1960).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Stevens with a shape having valleys and four additional adjustment screw (to make eight) because such changes are obvious modifications merely enabling a different shape to be formed and enabling greater adjustability.

7. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens (3,221,371) in view of Shinmoto (5,116,211).

Stevens teach an extrusion die having an inner die portion having a male form, the male form having a male complex shape with peaks; an outer die portion having a female form, the female form having a female complex shape with peaks which corresponds to the male complex shape of the male (Figs 2 and 7) form, the female complex shape surrounding and being separated from the male complex shape by a gap, flowable material capable of being extruded through the gap between the male and female complex shapes to form a hollow profile (Figs 2 and 7); and an adjustment mechanism comprising an outer member surrounding the outer die portion (Fig 2, #19), and adjustment screws (Fig 2, #s 20 and 55) threaded through the outer member and engaging the outer die portion at equidistant angular locations and configured to provide controlled incremental linear and rotational adjustment of the female complex shape relative to the male complex shape for adjusting the gap and for adjusting the position and orientation of the corresponding peaks of the male and female complex shapes

relative to each other; the male complex shape of the inner die portion is surrounded by the female complex shape of the outer die portion on all sides (Fig 7); the peaks are symmetrically divided on opposite sides of a central axis and number four (Fig 6); in which the inner die portion is fixed within a spider pipe (Fig 2); and in which the outer member of the adjustment mechanism is a retaining ring which secures the outer die portion to the spider pipe, the adjustment screws being threaded radially inwardly through the retaining ring to engage the outer die portion (Fig 2, through #21).

Stevens fails to teach the complex shape made by multiple valleys of both the inner and outer members; and there being at least 8 adjustment screws.

Stevens teaches complex shapes and "[T]here is no invention in merely changing the shape or form of an article without changing its function except in a design patent." (See *Eskimo Pie Corp. v. Levous et al.*, 3 USPQ 23) thus Stevens can be modified for the purpose of forming a shape having valleys. Shinmoto teaches the use of multiple (more than eight) adjustment screws are sufficient for the purpose of maximum and uniform adjustability (col 4, lines 4-9).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Stevens with a shape having valleys because such changes are obvious modifications merely enabling a different shape to be formed and at least four additional adjustment screw (to make at least eight) as taught by Shinmoto because it enables greater and uniform adjustability.

8. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens (3,221,371) in view of Grosset et al (5,733,491).

Stevens teach an extrusion die having an inner die portion having a male form, the male form having a male complex shape with peaks; an outer die portion having a female form, the female form having a female complex shape with peaks which corresponds to the male complex shape of the male (Figs 2 and 7) form, the female complex shape surrounding and being separated from the male complex shape by a gap, flowable material capable of being extruded through the gap between the male and female complex shapes to form a hollow profile (Figs 2 and 7); and an adjustment mechanism comprising an outer member surrounding the outer die portion (Fig 2, #19), and adjustment screws (Fig 2, #s 20 and 55) threaded through the outer member and engaging the outer die portion at equidistant angular locations and configured to provide controlled incremental linear and rotational adjustment of the female complex shape relative to the male complex shape for adjusting the gap and for adjusting the position and orientation of the corresponding peaks of the male and female complex shapes relative to each other; the male complex shape of the inner die portion is surrounded by the female complex shape of the outer die portion on all sides (Fig 7); the peaks are symmetrically divided on opposite sides of a central axis and number four (Fig 6); in which the inner die portion is fixed within a spider pipe (Fig 2); and in which the outer member of the adjustment mechanism is a retaining ring which secures the outer die portion to the spider pipe, the adjustment screws being threaded radially inwardly through the retaining ring to engage the outer die portion (Fig 2, through #21).

Stevens fails to teach the complex shape made by multiple valleys of both the inner and outer members; and there being at least 8 adjustment screws.



Grosset et al teaches a complex shape with over four peaks and valleys for the purpose of forming an extrusion usable as section members for windows or casings. Stevens teaches that four adjustment screws are sufficient for adjustment, however, regarding the claims, the mere duplication of parts, in this using case using eight adjustment screws has no patentable significance unless new and unexpected results are produced. In re Harza, 124 USPQ 378 (CCPA 1960).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Stevens with four additional adjustment screw (to make eight) because such a change is an obvious modification merely enabling greater adjustability and with a shape having at least four peaks and valleys as taught by Grosset et al because such a complex shape is usable as section members for windows and casings.

9. Claims 1-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevens (3,221,371) in view of Shinmoto (5,116,211) and Grosset et al (5,733,491).

Stevens teach an extrusion die having an inner die portion having a male form, the male form having a male complex shape with peaks; an outer die portion having a female form, the female form having a female complex shape with peaks which corresponds to the male complex shape of the male (Figs 2 and 7) form, the female complex shape surrounding and being separated from the male complex shape by a gap, flowable material capable of being extruded through the gap between the male and female complex shapes to form a hollow profile (Figs 2 and 7); and an adjustment mechanism comprising an outer member surrounding the outer die portion (Fig 2, #19),

Art Unit: 1722

and adjustment screws (Fig 2, #s 20 and 55) threaded through the outer member and engaging the outer die portion at equidistant angular locations and configured to provide controlled incremental linear and rotational adjustment of the female complex shape relative to the male complex shape for adjusting the gap and for adjusting the position and orientation of the corresponding peaks of the male and female complex shapes relative to each other; the male complex shape of the inner die portion is surrounded by the female complex shape of the outer die portion on all sides (Fig 7); the peaks are symmetrically divided on opposite sides of a central axis and number four (Fig 6); in which the inner die portion is fixed within a spider pipe (Fig 2); and in which the outer member of the adjustment mechanism is a retaining ring which secures the outer die portion to the spider pipe, the adjustment screws being threaded radially inwardly through the retaining ring to engage the outer die portion (Fig 2, through #21).

Stevens fails to teach the complex shape made by multiple valleys of both the inner and outer members; and there being at least 8 adjustment screws.

Grosset et al teaches a complex shape with over four peaks and valleys for the purpose of forming an extrusion usable as section members for windows or casings. Shinmoto teaches the use of multiple (more than eight) adjustment screws are sufficient for the purpose of maximum and uniform adjustability (col 4, lines 4-9).

It would have been obvious to one having ordinary skill in the art at the time of the Applicant's invention to have modified the invention of Stevens with a shape having at least four peaks and valleys as taught by Grosset et al because such a complex shape is usable as section members for windows and casings and to have modified the

invention of Stevens with at least four additional adjustment screw (to make at least eight) as taught by Shinmoto because it enables greater and uniform adjustability.

***Response to Arguments***

10. Applicant's arguments filed 9/29/06 have been fully considered but they are not persuasive.

The Applicant argues that claims 4 and 9 are not duplicates.

The Examiner disagrees. More detailed explanation is discussed above.

The applicant argues that Stevens alone is unobvious to include peaks and valleys and unobvious to have eight adjustment screws.

The examiner disagrees. Stevens shows one particular shape however it is inherently obvious that one may change the shape of the die to change the shape of the resulting product. Regarding the number of screws it is inherently obvious that increasing the number of moving elements enables movements to be more intricate. Stevens would be able to adjust its die with just two screws, but chose to have the level of intricacy provided by four screws. Such could have just as easily been 8 or 100 screws for greater intricacy.

The applicant argues that Shinmoto teaches adjusting the annular lip every 18 degrees over a diameter, but does not teach providing controlled incremental angular adjustments.

The examiner disagrees. Such 18 degree adjustments reads on incremental angular adjustments.

Art Unit: 1722

The applicant argues that there is no motivation to combine Shinmoto with Stevens.

The examiner disagrees. As industrial tolerances get smaller and smaller, it would be obvious to increase the number of screws as taught by Shinmoto because such increases not only the complexity of Stevens but also increases its capabilities.

The applicant argues that the combination of Stevens and Grosset would not result in eight adjustment screws.

The examiner notes that such a combinations addresses the obviousness that the number of screws of Stevens would be increased to eight.

The applicant argues that the combination of Stevens, Grosset and Shinmoto is not obvious.

The examiner disagrees. While such may increase cost and complexity, such also increases the apparatus's abilities.

Finally the examiner notes that providing incremental rotational adjustment is achieved by the process of adjusting screws (as few as three and as many as can be imagined) in a particular order. The applicant does not set forth a structural property of the apparatus that enables rotational adjustment that has not before been seen in the art. Rather, the apparatus is merely a combinations of screws and an irregularly shaped die, such a combination being obvious in the art as set forth above.

### ***Conclusion***

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

Art Unit: 1722

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

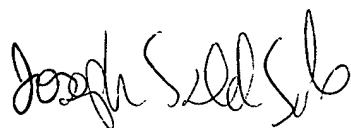
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph S. Del Sole whose telephone number is (571) 272-1130. The examiner can normally be reached on M-F 8:30 - 5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Yogendra Gupta can be reached on (571) 272-1316. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 1722

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Joseph S. Del Sole

10/11/06